## **ABSTRACT**

A method to determine an analyte concentration of an anticoagulated plasma by performing at least two different measurements on a mixture of a blood sample corresponding to said anticoagulant plasma and of liquid reagent is described. The method comprises a) mixing a volume of said blood sample with a five-fold, or more, volume of said liquid reagent, b) performing said at least two measurements on said mixture, at least one of which correlates with the hematocrit of said blood sample and at least one of which correlates with said analyte concentration, and c) computing the results from the measurements when the volumes in a) are precise and accurate or when the hematocrit of said blood sample in b) is known to determine said analyte concentration of said anticoagulated plasma. In addition, a measurement and determination device for performing measurements on blood, anticoagulated blood and/or anticoagulated plasma samples, and an equipment kit are described.